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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,264	05/09/2007	Yasutaro Seto	80400(303227)	3624

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EXAMINER

JOYNER, KEVIN

ART UNIT	PAPER NUMBER
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1797

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,264	Applicant(s) SETO ET AL.	
	Examiner KEVIN C. JOYNER	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-8 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-8 and 12-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-8 and 12-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimura (Japanese Document No. JP 05068832) in view of Hasebe et al. (U.S. Patent No. 5,047,022).

For clarification, the machine English translation of Japanese Document No. JP 05068832 will be referenced herein. Concerning claims 1, 12 and 18, Yoshimura discloses a deodorizing filter (Figure 1) comprising a first deodorizing filter (1) regulated so as to have a high-pH environment and a second deodorizing filter (2) regulated so as to have a low-pH environment, wherein the filters are active-carbon filled paper (paragraphs 5-9). Yoshimura does not appear to disclose that the first and second deodorizing filters are filters of a cobalt phthalocyanine complex and an iron phthalocyanine complex on said active-carbon-filled paper filters. Hasebe discloses a deodorizing filter for removing odors from the atmosphere (column 1, lines 50-68). The reference continues to disclose that the filter comprises a cobalt phthalocyanine complex and an iron phthalocyanine complex (column 2, lines 18-26) on said filter (column 2, lines 55-61) in order to decompose hydrogen sulfide and mercaptan by the

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catalytic action of the complex having oxidation reduction powers (column 2, lines 62-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the filter of Yoshimura to include a cobalt phthalocyanine complex and an iron phthalocyanine complex on one or both filters of Yoshimura in order to decompose hydrogen sulfide and mercaptan by the catalytic action of the complex having oxidation reduction powers as exemplified by Hasebe.

Claims 4, 5, 7, 13, 14, 16, 19, 20 and 22 further requires that the weight ratio of the phthalocyanine complex/iron phthalocyanine be between 95/5 to 55/45 and the amount of the complexes be in the range of 200 to 20,000 μ g with respect to 1 g of the paper. It would have been well within the purview of one of ordinary skill in the art to optimize weight ratios of said complexes and the amount of said complexes in order to maximize the deodorization effects against foul smelling materials such as hydrogen sulfide and mercaptan. Only the expected results would be attained.

Claims 6, 15, and 21 further requires that the pH of the high-pH environment is between 7.5-12.0 and the pH of the low-pH environment is 1.5-5.0. The deodorizing filter of Yoshimura will produce a filter creating a high and low pH environment as set forth above and disclosed in paragraphs 12-16. Nonetheless, for further prosecution, it would have been well within the purview of one of ordinary skill in the art to optimize the high and low pH environment in the filter of Yoshimura in order to maximize the deodorization results against an acid and alkaline substance simultaneously. Only the expected results would be attained.

Claims 8, 17 and 23 further requires that the active-carbon-filled paper contain active-carbon at a content of 40 to 80 mass %. As set forth in paragraph 6 of Yoshimura, said active-carbon-filled paper contains a content of at least 10% active-carbon or more. As such, it would have been well within the purview of one of ordinary skill in the art to optimize the amount of active-carbon in said filter paper in order to maximize the efficiency and effectiveness of the filtering process. Only the expected results would be attained.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 4-8 and 12-23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 7,306,660 in view of Yoshimura (Japanese Document No. JP 05068832 A) and Hasebe et al. (U.S. Patent No. 5,047,022).

All of the limitations of the instant claims are met with respect to claims 1-33 of '660 except for the first filter regulated to have a high-pH environment and a second filter regulated to have a low-pH environment. However, as set forth above, Yoshimura discloses this limitation in order to provide a filter that is effective against both an acid and alkaline substance efficiently (paragraph 3). As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify '660 to include a the first filter regulated to have a high-pH environment and a second filter regulated to have a low-pH environment in order to provide a filter that is effective against both an acid and alkaline substance efficiently as exemplified by Yoshimura. Furthermore, '660 does not appear to disclose that the first and/or the second filter comprise an iron

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phthalocyanine complex. However, as set forth above with respect to Hasebe, the application of an iron phthalocyanine complex in conjunction with a cobalt phthalocyanine complex produces the predictable result of eliminating foul smells such as hydrogen sulfide and mercaptan (column 2, lines 20-65). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify '660 to include an iron phthalocyanine complex in conjunction with a cobalt phthalocyanine complex to produce the predictable result of eliminating foul smells such as hydrogen sulfide and mercaptan as exemplified by Hasebe.

Concerning claims 4, 5, 7, 13, 14, 16, 19, 20 and 22, it would have been well within the purview of one of ordinary skill in the art to optimize weight ratios of said complexes and the amount of said complexes in order to maximize the deodorization effects against foul smelling materials such as hydrogen sulfide and mercaptan in the filter of '660 in view of Hasebe. Only the expected results would be attained.

Concerning claims 6, 15, and 21, it would have been well within the purview of one of ordinary skill in the art to optimize the high and low pH environment in the filter of '660 in view of Yoshimura in order to maximize the deodorization results against an acid and alkaline substance simultaneously. Only the expected results would be attained.

Concerning claims 8, 17 and 23, it would have been well within the purview of one of ordinary skill in the art to optimize the amount of active-carbon in the filter paper in order to maximize the efficiency and effectiveness of the filtering process of '660. Only the expected results would be attained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN C. JOYNER whose telephone number is (571)272-2709. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCJ

/Sean E Conley/
Primary Examiner, Art Unit 1797